

REMARKS

Upon entry of this amendment claims 1-3 are all claims pending in this application. By this Amendment, to further clarify the invention, Applicant amends claim 1.

Gupta only teaches that a microprocessor 100 includes CPU, as well as DSP, microcontrollers, etc. While the clock divider 128 disclosed by Gupta produces a system clock signal that is distributed over the CPU 100 via the clock tree 132, Gupta does not disclose that the CPU directly controls the output of the pulse generating section. In Gupta, the power control register 106 (CPU) does not directly control the output of the clock generator 130. Instead, the power control register 106 only directly controls the clock divider 128 (e.g., see Figs. 3 and 5). Thus, as acknowledged by the Examiner, Gupta fails to teach or suggest the central processing unit as set forth in claim 1 (page 2 of the Office Action dated August 21, 2003).

Hironari only teaches a much more complex control unit comprising of CPU, two frequency dividers (1st D-FF7 and 2nd D-FF8), six programmable timer modules (PTM), two waveform shaping circuits (pulse output means, ¶ 19 of the Hironari), two pickups, two kinds of pulsers and a drive circuit (*see* Drawing 1; ¶ 10 of the Hironari's detailed description).

Hironari's CPU controls processing in repose to various input data from the outside (e.g. from a frequency divide 5) and sets the counter value of PTM 9-19 (¶ 11 of Hironari). If the interrupt signal from frequency dividers enters CPU, CPU will raise one counted value of the internal counter first and if any processing must be performed, the counted value is transmitted to 1st PTM. If it is after the processing (step 213), a value of "H" or "L" is outputted to the frequency dividers (Drawing 2; ¶¶ 25 and 26 of Hironari).

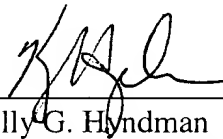
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In short, Hironari's CPU directly controls the count means (resetting the counter value by processing at steps 205-211) and not the pulse output means (e.g. see Drawings 1). Therefore, there is neither teaching nor any suggestion in Gupta or Hironari, taken singly or together, of a central processing unit directly controlling the output of the pulse generating section as set forth in claim 1.

Entry and consideration of this Amendment are respectfully requested.

Respectfully submitted,



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